

IN THE CLAIMS:

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-9 (cancelled)

10. (previously presented): A method of treating an autoimmune disorder in a subject comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to interleukin-22 (IL-22) in an amount sufficient to treat the autoimmune disorder in the subject.

11 (cancelled)

12. (previously presented): The method of claim 10, wherein said autoimmune disorder is selected from the group consisting of rheumatoid arthritis, osteoarthritis, multiple sclerosis, myasthenia gravis, Crohn's disease, inflammatory bowel disease, lupus, diabetes and psoriasis.

13. (previously presented): The method of claim 10, wherein said autoimmune disorder is rheumatoid arthritis.

14. (currently amended): The method of claim 12 ~~10~~, wherein said antibody is a neutralizing anti-IL-22 antibody or an antigen-binding fragment thereof.

15. (cancelled)

16. (original): The method of claim 14, wherein said subject is a human.

17. (previously presented): A method of ameliorating symptoms associated with arthritis, comprising administering to a subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to ameliorate the symptoms in the subject.

18. (original): The method of claim 17, wherein said arthritis is rheumatoid arthritis.

19. (original): The method of claim 17, wherein said IL-22 antibody is administered therapeutically.

20. (original): The method of claim 17, wherein said IL-22 antibody is administered prophylactically.

21-33 (cancelled)

34. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

35. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

36. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

37. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

38. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

39. (previously presented): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

40. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

41. (previously presented): The method of claim 40, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

42. (currently amended): The method of ~~either of claim 12 10 or 17~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

43. (previously presented): A method of treating rheumatoid arthritis in a subject, comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to treat the autoimmune disorder in the subject, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

44. (previously presented): The method of claim 43, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

45. (previously presented): The method of claim 43, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

Please add new claims 46-62:

46. (new): The method of claim 17, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

47. (new): The method of claim 17, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

48. (new): The method of claim 17, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

49. (new): The method of claim 17, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

50. (new): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

51. (new): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

52. (new): The method of claim 51, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

53. (new): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

54. (new): The method of claim 17, wherein said arthritis is psoriatic arthritis.

55. (new): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

56. (new): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

57. (new): The method of claim 56, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

58. (new): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

59. (new): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

60. ((new): The method of claim 14, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED_{50} of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

61. (new): The method of claim 39, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED_{50} of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

62. (new): The method of claim 59, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED_{50} of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).